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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,873	02/07/2005	Volker Stanjek	WAS0681PUSA	4401
22045	7590	07/12/2007		
BROOKS KUSHMAN P.C. 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075			EXAMINER MOORE, MARGARET G	
			ART UNIT	PAPER NUMBER
			1712	
			MAIL DATE	DELIVERY MODE
			07/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/523,873	<b>Applicant(s)</b> STANJEK ET AL.	
	<b>Examiner</b> Margaret G. Moore	<b>Art Unit</b> 1712	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11 to 30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11 to 28 and 30 is/are rejected.
- 7) ☒ Claim(s) 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. Claim 30 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. This claim depends upon canceled claim 1 and thus is not further limiting. For prior art purposes it will be assumed that this claim depends upon claim 11.
2. Applicant is advised that should claim 25 be found allowable, claim 27 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).
3. Claims 11 to 27 and 30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support for the limiting "organic solvent" found in the specification. The specification generally refers to solvents but does not specify organic solvents. Applicants cannot rely on the two specific solvents used in the working example as support for the much broader term "organic".
4. Claims 11 to 27 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 11, reference to X as sulfur is confusing since the reactive silanes that limit the formula (6) will not result in a sulfur X group.

Also in claim 11, "W" is not defined and R'X should be R'<sub>x</sub>.

In claim 26, note the above rejection regarding X as sulfur.

5. As an aside the Examiner notes that in claim 1, claim 26 and claim 28 there appears to be a period "." after reference to the formula (6). This is confusing since a period normally indicates the end of a sentence and, correspondingly, the end of the claim. Applicants are requested to delete this period. The Examiner did not notice this in the previous examination and as such this is not being made as a formal new ground of rejection.

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claim 28 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Majolo et al.

This rejection relies on the rationale noted in the previous office action as it then applied to claim 11. On page 9 of the response dated 4/23/07, applicants state that claim 28 requires the base polymer to be a hydroxyl functional polyurethane prepolymer. In fact, claim 28 only requires that a polyurethane prepolymer. Since Majolo et al. is specific to a polyurethane polymer, this claimed feature is anticipated.

With regard to applicants' comments about the hydroxyl groups in Majolo et al., this fails to distinguish the claims from the prior art. On one hand, note that "R" in formula (6) can be hydrogen. Thus, while referred to as having alkoxysilane functionalities, the claimed structure per se is not so limiting. On the other hand, note that the polyurethane prepolymer in Majolo et al. is initially an alkoxysilane terminated polyurethane prepolymer (column 7, line 27). The subsequent hydrolysis of these alkoxy groups is not excluded by this claim. Even if applicants were to include language such as that found in claim 11, i.e. wherein the prepolymer is neat or dissolved in organic solvent, this would not exclude the presence of water in the coating composition since this language limits the prepolymer (A) and not the coating formulation (B). Note

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that the coating formulation (B) "comprises" the prepolymer (A). This open language allows for the presence of water.<sup>1</sup>

8. Claims 11 to 14, 17 to 21, 24, 25 and 27 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sakagami et al.

This rejection is based on the rationale noted in the previous office action and as such this will not be repeated. Applicants argue that there is a significant and profound difference between methylene spacer and the more commonly used propylene spacers; however, applicants do not provide data or evidence of a significant and profound difference.

Reference to the working examples in Sakagami et al. carry no weight because 1) patentees are not limited to their working examples and do not require water in the composition therein and 2) as noted above, there is nothing that excludes water from the composition and there is no evidence of the reactivity of methylene spaced alkoxy silyl groups in water.

9. Applicants have inserted the limitation of claims 13 and 15 into claim 11. The Examiner has previously rejected claim 15 as being obvious over Majolo et al. Upon reconsideration, however, the Examiner has withdrawn the basis for this rejection, as it would have applied against the currently amended claim 11. That is, there is nothing in Majolo et al. that would suggest selecting a specific alkoxy silane compound meeting (6) as now claimed to result in a composition having a hardness as claimed. As noted in the previous office action, if the composition is anticipated then the coating composition will necessarily have this property. Since this claim is no longer anticipated one must consider the obviousness of obtaining a hardness value as claimed. There is nothing in Majolo et al. that would lead the skilled artisan to arrive at a composition having the necessary hardness.

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<sup>1</sup> To this extent, applicants provide no support for their assertion regarding the inoperability of methylene


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10. Claims 15, 16, 22, 23, 26, 29 and 30 are neither taught nor suggested by the prior art.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday and Wednesday to Friday, 10am to 4pm.

  
Margaret G. Moore  
Primary Examiner  
Art Unit 1712

mgm  
7/5/07